

The Unimaginably Magnificent Design of Things

Pastor Joseph Clark – July 10, 2020

“By faith we understand that the universe was created by the word of God, so that what is seen was not made out of things that are visible.”

- Hebrews 11:3

“The heavens declare the glory of God; the skies proclaim the work of his hands”

- Psalms 19:1

“You can’t get something from nothing.”

- J.P Moreland

Did God create the Universe, or did it just happen through some cataclysmic accident? Did God create the Big Bang? What was here before the Big Bang? Can something just appear out of nothing by accident?

Renowned Oxford University mathematical physicist Roger Penrose published a paper in which he calculated the probabilities of the Universe accidentally coming into creation without a deliberate architect. Penrose’s calculations resulted in the compelling conclusion that the creator of the Universe had an accuracy in all things required to the extent of 1 part in 10 to the power of 10 to the power of 123, that is 1 followed by 10 to the 123rd power. An accuracy and precision which is unthinkable. Otherwise, there would have been nothing. Oxford University Professor of Mathematics John Lennox double checked Penrose’s numbers and observed, that Penrose’s resulting accuracy number is a “number which it would be impossible to write out in the usual decimal way, because even if you were able to put a zero on every particle in the universe, there would not even be enough particles to do the job.” That is the degree of accuracy that was demonstrated when the Universe was created. Basically, this is a scientific way to say that the Universe was not created by chance. If it was not created by chance, then it was created deliberately. If we can conclude that it was created deliberately, then we must conclude that there was a creator. I could stop writing right here. But I will not.

This is how unimaginably brilliant God is. In order for the Universe to be formed in a manner that resulted in sustaining a planet like Earth which can sustain life, the following had to work in perfect harmony:

- 1) **An optimal expansion rate.** The birth of the Universe took place with exactly the right amount of force. Stephen Hawking states, “If the rate of expansion one second after the Big Bang had been smaller by even one part in a hundred thousand million million, the Universe would have re-collapsed before it ever reached its present size.”
- 2) **A consistently controlled expansion rate.** At the same time that the expansion rate had to be great enough for the Universe to avoid a big crunch, if its outward force had been ever so slightly greater, no stars or galaxies would have formed.
- 3) **Force of gravity.** If the gravitational force were altered by even 0.001 percent, neither Earth nor our Sun would be here now.
- 4) **Balance between matter and anti-matter.** In the formation of the Universe, the balance between matter and antimatter, and the excess of matter over antimatter, must be constantly accurate to one part in ten billion for the Universe to arise.
- 5) **Mass Density.** In order for physical life to be sustained, the mass density of the Universe holds at better than one part in a trillion trillion trillion trillion.
- 6) **Space Energy Density.** The space-energy density of the Universe holds at the precisely sustainable ratio of one part in 10¹²⁰.

A pretty cool recipe. Father in Heaven - props 😊.

“He determines the number of the stars; he gives to all of them their names.”

– Psalm 147:4

Let us now take this down another level to our Earth. The following constants work in a perfect synchronized combination, in order for Earth to sustain life:

Oxygen Level - On Earth, oxygen comprises 21 percent of the atmosphere. That precise figure is an Anthropic Constant that makes life on Earth possible. If oxygen were 25%, fires would erupt spontaneously, if it were 15%, human beings would suffocate.

Atmospheric Transparency - If the atmosphere were less transparent, not enough solar radiation would reach the Earth's surface. If it were more transparent, we would be bombarded with far too much solar radiation down here. (In addition to atmospheric transparency, the atmospheric composition of precise levels of nitrogen, oxygen, carbon dioxide, and ozone are in themselves Anthropic constants).

Moon-Earth Gravitational Interaction - If the interaction were greater than it currently is, tidal effects on the oceans, atmosphere, and rotational period would be too severe. If it were less, orbital changes would cause climatic instabilities. In either event, life on Earth would be impossible.

Carbon Dioxide level - If the CO₂ level were higher than it is now, a runaway greenhouse effect would develop (we would all burn up). If the level were lower than it is now, plants would not be able to maintain efficient photosynthesis (we would all suffocate).

Water Vapor Levels - If water vapor levels in the atmosphere were greater than they are now, a runaway greenhouse effect would cause temperatures to rise too high for human life. If they were less, an insufficient greenhouse effect would make Earth too cold to support human life.

Jupiter - If Jupiter were not in its current orbit, the Earth would be bombarded with space material. Jupiter's gravitational field acts as a cosmic vacuum cleaner, attracting asteroids and comets that might otherwise strike Earth.

The Earth's Crust - If the thickness of the Earth's crust were greater, too much oxygen would be transferred to the crust to support life. If it were thinner, volcanic, and tectonic activity would make life impossible.

The Earth's Rotation - If the rotation of the Earth took longer than 24 hours, temperature differences would be too great between night and day. If the rotation period were shorter, atmospheric wind velocities would be too great.

Axis Tilt - The 23-degree axis tilt of the Earth is just right. If the tilt were altered slightly, surface temperatures would be too extreme on Earth.

Atmospheric Discharge - If the atmospheric discharge (lightning) rate were greater, there would be too much fire destruction, if it were less there would be little nitrogen fixings in the soil.

Seismic Activity - If there were more seismic activity, much more life would be lost; if there were less, nutrients on the ocean floors and in river runoff would not be cycled back to the continents through tectonic uplift. (Yes, even earthquakes are necessary to sustain life as we know it.)

Pretty slick, Lord. Pretty slick!

“In the beginning, God created the heavens and the earth.”

- Genesis 1:1

Now let us take it from our own Earth to organic life on Earth and ourselves.

One gram of human DNA can store 455 exabytes of data. All the data that exist in the world today could fit on a teaspoon full of DNA. The complexity of that design is too advanced for human minds to fathom.

There is more information stored in your DNA than can be accommodated by every hard drive on Earth. Who put all this data in the DNA? Science cannot answer this.

You and I have over 60,000 miles of blood vessels in our bodies. If they were all stretched out, they could circle the globe more than twice.

Humans are the only organic life on Earth that worship God.

Humans are the only organic life that can say “I love you.”

Humans are the only organic life that express emotion through the arts.

Where scientists run into trouble is when they attempt to explain what existed prior to the Big Bang. It is believed that in order for there to be a big bang the matter that exploded was smaller than an atom. But who created that matter? Reason demands that there was an origin to the components that made up the pre-big bang existence. Logic always points back to a pre-creation creator. Nothing less than God can exist without an origin. Without a beginning. The famed Stephen Hawking is quoted as saying "There is nothing south of the South Pole, so there was nothing around before the Big Bang." He actually dismisses the issue as opposed to being open to the possibility of God.

What is the likelihood of all of the necessary pieces and events to occur for our Universe, our galaxy, our planet, and our own bodies to exist as they do now by accident? The mathematical probabilities are best illustrated in this example:

Have a friend hold a sewing needle across the room from you and with you holding a length of thread, run across the room at him as fast as you can and attempt to thread the needle without reducing your speed. It is more likely that you could thread the needle successfully ten million times in a row without failing a single time than that all of creation happen the way it did by accident or coincidence.

A 747-passenger liner is billions upon billions of times less complex than the building blocks of human life, the dynamics of our Earth, and most certainly of our galaxy or universe. Yet, what are the chances that without a constructor or creator, a 747-passenger liner could somehow just magically evolve or accidentally appear or self construct by accident over billions of years?

"For His invisible attributes, namely, His eternal power and divine nature, have been clearly perceived, ever since the creation of the world, in the things that have been made. So, they are without excuse."

- Romans 1:20

The popular scientific estimation of the age of the Universe is 13.798 Billion years. That is when scientists hypothesize that the Big Bang occurred, a massive cosmological event which created all matter and what would eventually become our Universe and everything in it. Immediately after the Big Bang, the Universe was believed to be quite small, and it began to expand, and we now know that it is ever expanding today. However, scientists cannot answer the following questions:

- 1) What was here before the Big Bang?
- 2) How did it happen?

All that we can detect and perceive has some form of origin or creation story. Whether it is an ocean liner, a speck of dust, a lump of gold, or a mound of manure, we know or can speculate how it originated. Except the Universe. How can something be created out of nothing?

As humans we live in a world and a consciousness in which all things have a beginning, and that beginning is typically the consequence of some accident or a planned or unplanned event.

For example, a tree grows in the forest. Where did it come from? A seed. Where did the seed come from? It blew off another tree. Simple enough. What about a tree growing in the middle of a desolate barren wasteland and there are no other trees around for a thousand miles in all directions? Simple again. A bird must have carried a seed in its beak and dropped it where it germinated and became a tree. Either that or it is the last remnant of a forest which once thrived in this area.

The possibilities are endless. However, in the case of the Universe the answers range from, ‘there was nothing and we will never have data to suggest more’ to ‘the Universe was smaller than an atom and for some reason that we cannot determine it exploded and began expanding from there’ or ‘our Universe is part of a multiverse and so it is the bi-product of some other universe’s cataclysm’. I find this theory kind of funny as it seems that it now passes the buck of our Universe’s beginning to some other universe. In any event, the bottom line is that if you follow the iterations of creation back to an initial stage, at some point there was nothing and then suddenly some event occurred... unless you wish to believe that the Universe was just always here, it had no creation or beginning and go in peace. Even if there was some form of matter smaller than an atom that exploded and became the Big Bang, who or what created that matter? If you scan blogs about what existed before the Big Bang, the answers basically amount to ‘just accept that the necessary components which eventually exploded to create the Universe were always here.’ So, scientists are right back to where they struggle to answer how the heck something can

- a) Just always be here and never have an origin, or

b) Suddenly appear out of nothing.

Think very carefully for a moment. Think of something that does not have a point or form of origin? Any form of matter. Gas, solid, liquid. Name something that did not have some form of creation or beginning. If ever there was a compelling argument for God the merciful creator, an all-powerful consciousness that created the Universe, for me it is found in the simple question that atheists cannot come to terms with: “If nothing existed before the Big Bang, then who or what created the Big Bang?” Our Universe could be one of a billion universes that exist like a grain of sand in a desert where each grain of sand is another entire universe. Our Universe could be some grand experiment which rests like an ant farm displayed on some extraterrestrial intelligence’s hobby table. It does not matter at the end of the day, it all had to have started at some point and it all had to have had some form of origin. All that exists must have at some point started at its own proverbial ground zero. What or who was so all-powerful as to bring all that exists into existence?

God.

Is that not far easier to accept than “it has always been here”?

A theory known as ‘inflation’ was pioneered by a scientist named Alan Guth, who suggests that our Universe began as a speck smaller than an atom and doubled in size at an incredible rate over and over again until it is what it is today, which of course is ever expanding. So, if it is expanding there must be limits to our Universe. There must be boundaries. What is outside those boundaries? What is outside of our Universe? Who is outside our Universe? Does our Universe have a beginning and an end? When you think of it, why is it difficult to believe that all that we behold and that governs us (physics, matter, time, gravity, etc.) is a perfect system architected by God our Father in Heaven?

All galaxies in this universe are moving away from us. This is known as “Hubble’s Law”. This is how we know that our Universe is expanding. Therefore, we know it started from a single point. A single wonderful moment. The Big Bang.

“In the beginning, God created the heavens and the earth. The earth was without form and void, and darkness was over the face of the deep. And the Spirit of God was hovering over the face of the waters. And God said, “Let there be light,” and

there was light. And God saw that the light was good. And God separated the light from the darkness. God called the light Day, and the darkness He called Night. And there was evening and there was morning, the first day.”

- Genesis 1:1-31

With the exception of thought, everything that exists has a beautiful structure of building blocks which consist of mathematical perfection in order for matter and energy to exist. There is something incredibly divine about the perfection of it all. Truly miraculous.

Scientists have established that at the Big Bang, the Universe expanded several times faster than the speed of light. They call it “plank time”. The Universe went from being small enough to fit in the palm of your hand to the size of the Earth in a fraction of a second and it has continued growing since that moment. Here is the miracle: Scientists can determine this. However, where they are baffled is that the laws of time and relativity dictate that you cannot travel faster than the speed of light. They have the evidence that the Universe expanded faster than the speed of light; however, science simultaneously suggests that this is not possible.

At the earliest moments of the Big Bang, the Universe was a hot, chaotic broth of sub-atomic particles; however, none of the matter as we know it today existed. It was all coming into existence a stage at a time. Einstein’s theory which we are all familiar with, $e=mc^2$, states that energy turns into matter. As the Universe cooled and expanded, sub-atomic particles stopped converting into energy, collided with each other, and became particles of matter. This also created anti-matter. Matter and anti-matter annihilated each other on contact. Since there was more matter than anti-matter, matter prevailed and we are here today. At this stage, the Universe is about 1 second old.

Now as the Universe continues to expand, the particles slow down and bond together to form the first atoms and compounds. The first elements to be created were hydrogen, helium, and lithium. The Universe began to light up in all directions as the dust and gases travelling throughout the Universe ignited and became stars.

There was a time when science stated that since it had proven and discovered how the Universe came to be, that it disproved the existence of God. In other words,

‘wake up, people, there is no magical God who created everything, it was a massive big bang and all of the events and coincidences which happened because of it.’

But isn’t that exactly what science has proven? The divine miracle of God’s creation?

Has science not uncovered an even more magnificent story which leaves us with as many questions as answers?

Can energy be created?

No.

Why is it so hard to believe that divine intent and energy in the form of the Word of God caused the Big Bang, and all that followed which science has explained is merely the result of God’s method to create all that there is?

“For thus says the LORD, who created the heavens (he is God!), who formed the Earth and made it (he established it; he did not create it empty, he formed it to be inhabited!): “I am the LORD, and there is no other.”

- Isaiah 45:18

According to NASA the Milky Way galaxy is 100,000 light years across. How big is that? It would take 100,000 years to travel from one end to the other if you were moving at the speed of light. It takes light 8 minutes to travel from the sun to the Earth. It takes that same light 5.3 hours to reach Pluto.

NASA estimates, based on the Hubble telescope, that there are hundreds of billions of galaxies like ours.

What is the likelihood of all the necessary pieces and events to occur for our Universe, our galaxy, our planet, and our own bodies to exist as they do now by accident?

Remember my analogy of threading a needle a million times in a row, running at high speed, and never missing. When you measure it in these terms, why is it still difficult to believe in a God creator?

All things on this world and in this universe have a structure and consist of building blocks. God is an incredible architect and designer. All things consist of atoms. Flowers, gold, manure, water, all things. Atoms are made up of sub-atomic particles. All atoms have a nucleus consisting of particles called protons and neutrons. Very small particles known as electrons orbit the nucleus. Scientists now know that neutrons and protons are made up of even smaller particles known as quarks. Presently, science knows of nothing smaller than a quark. All these particles are held together by forces. Examples of forces which we can relate to are gravity and magnetism. Imagine if we could see inside a quark and discovered a universe inside it. Or if it turned out that our entire universe existed in a quark in some other plain of existence.

There is a number sequence known as the *Fibonacci sequence* or *Golden Ratio*. It is a simple pattern in which each number is the sum of the two numbers which preceded it. However, here is where it is quite amazing. It seems to be the standard equation to the cosmos. The number of petals in a flower follows the sequence, the number of seeds in a flower, the seed pods on a pinecone, structure of fruits and how branches in a tree split. The sequence also applies to spiral structures such as a seashell, a hurricane, and a spiral galaxy. The golden ratio applies to the proportion of our eyes, nose, and mouth on the human face. It also applies to our fingers and other parts of our bodies. The exact sequence can also be applied to the reproductive sequence of animals and insects. It seems that God truly is a mathematician, as all things in existence have what seems to be a very well-thought-out design.

There is nothing chaotic about the structure of our Universe. All things exist because of His design. When you look at the design and perfect engineering that goes into all forms of matter, the evidence of God's recipe becomes obvious.

Sources:

Biblegateway.com. 2020. Biblegateway.Com: A Searchable Online Bible in Over 150 Versions And 50 Languages. [online] Available at: <<https://www.biblegateway.com/>> [Accessed 3 June 2020].

Topical Bible - Bible Verses by Topic. <https://www.openbible.info/topics/>.

30 inspiring Christian quotes. (2020, February 10).

Crosswalk.com. <https://www.crosswalk.com/faith/spiritual-life/inspiring-quotes/30-inspiring-christian-quotes.html>

What does the Bible say about universe? (n.d.). <https://www.openbible.info/topics/universe>

Was the universe created by god? (n.d.). Blue Letter

Bible. https://www.blueletterbible.org/faq/don_stewart/don_stewart_1364.cfm

Total amount of DNA in the body – The DNA exchange. (n.d.). The DNA Exchange. <https://thednaexchange.com/tag/total-amount-of-dna-in-the-body/>

How much data is there in the world? (n.d.). Bernard Marr. <https://www.bernardmarr.com/default.asp?contentID=1846>

JP Moreland's web » who or what caused god? (n.d.). JP Moreland's Web » Welcome!. <https://www.jpmoreland.com/articles/who-or-what-caused-god/>

The case for a creator. (2014, October 22). Focus on the Family. <https://www.focusonthefamily.com/faith/the-case-for-a-creator/>

The universe confirms the Bible. (2008, March 6). Answers in Genesis. <https://answersingenesis.org/astronomy/the-universe-confirms-the-bible/>